

PORSF  
11.3.18.1 v9DATE OF ISSUE  
9/21/2004SUPERSEDES  
8/23/2001

## SECTION I - GENERAL INFORMATION

## Chemical Name &amp; Synonyms

Trade Name & Synonyms  
YIELD AEROSOLFamily:  
PETROLEUM DISTILLATE MIXTURE

Formula Mixture --&gt; X

Manufacturer's Name:  
CHEMSEARCH DIV. OF NCH CORP.Address:  
BOX 152170  
IRVING, TX 75015Prepared By:  
L Boynton/ChemistProduct Code Number  
5068Emergency Phone Number  
800-424-9300

## SECTION II - HAZARDOUS INGREDIENTS

## THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)	Hazard	TLV	PEL	STEL	CAS #
ALIPHATIC PETROLEUM DISTILLATES	FLAM/IRR	100 PPM**1	500 PPM**2	N/E	*
ETHYL ACETATE	FLAM/IRR	400 PPM 1	400 PPM 2	N/E	141-78-6
SODIUM SULFONATE	IRRITANT	5 MG/M3 \$1	5 MG/M3 \$2	10MG/M3 \$1	58608-26-4
LIGHT NAPHTHENIC HYDROTREATED PETROLEUM DISTILLATES	IRRITANT	5 MG/M3 \$1	5 MG/M3 \$2	10MG/M3 \$1	64742-53-6
SYNTHETIC ISOPARAFFINIC HYDROCARBON	IRRITANT	5 MG/M3 \$1	5 MG/M3 \$2	10MG/M3 \$1	64742-47-8
N-BUTANE	FLAM/ASPHY	1000 PPM 1	N/E 2.	N/E	106-97-8
PROPANE	FLAM/ASPHY	1000 PPM 1	1000 PPM 2	N/E	74-98-6

\* 64742-47-8, 64742-88-7, 8052-41-3  
\*\* STODDARD SOLVENT VALUES  
\$ OIL MIST VALUES

## SECTION III - PHYSICAL DATA

Boiling Point (F):	160-203*	Specific Gravity (H2O=1):	0.84
V Pressure (MM HG):	9.4-10.5	Color:	AMBER-DARK AMBER
A Density (AIR=1):	3.3-3.7	Odor:	PETROLEUM/VINEGAR
PH @ 100% :	N/A	Clarity:	TRANSPARENT
% Volatile by Volume:	71	Evaporation Rate (BU A/C=1):	0.3-0.4
H2O Solubility:	NEGLIGIBLE	Viscosity:	NON-VISCOUS

## SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point <80°F / SETFLASH	Flammable Limits PRODUCT MIXTURE	LEL 0.5%	UEL 11.5%		
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Extinguishing Media X <--Foam	<--Alcohol Foam	X <--CO2	X <--Dry Chemical	X <--Water Spray	<--Other
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Special Fire Fighting Procedures: FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. COOL FIRE-EXPOSED CONTAINERS WITH WATER SPRAY TO PREVENT BURSTING.					
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Unusual Fire and Explosion Hazards: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO DISTANT AND/OR LOW-LYING SOURCES OF IGNITION AND FLASHBACK. PRODUCT MAY PRODUCE A FLOATING FIRE HAZARD AS LIQUID FLOATS ON WATER. FLAME EXTENSION IS >18 INCHES, BURSTBACK IS >3 INCHES.					
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Aerosol Level (NFPA 30B): 3					
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NFPA 704 Hazard Rating (0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)					
2 <--Health 4 <--Flammability 0 <--Instability <--Special					

## SECTION V - HEALTH HAZARD DATA

Threshold Limit Value:  
NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

## Effects of Overexposure:

-Acute (Short Term Exposure)

EYE CONTACT: CAUSES SEVERE IRRITATION SEEN AS TEARING, SWELLING, STINGING, REDNESS, A BURNING SENSATION, BLURRED VISION, AND EXCESSIVE BLINKING. MAY CAUSE CONJUNCTIVITIS AND CORNEAL DAMAGE.

CONTACT: CAUSES IRRITATION SEEN AS ITCHING, REDNESS, SWELLING, AND A BURNING SENSATION. PROLONGED OR REPEATED CONTACT AS FROM CLOTHING WET WITH AL MAY CAUSE DRYING, DEFATTING, AND CRACKING OF THE SKIN. PRODUCT MAY BE ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS.

INHALATION: MAY CAUSE A BURNING SENSATION, CHEST PAIN, DIFFICULTY BREATHING, AND RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. AT LOW VAPOR CONCENTRATIONS, NO HARMFUL EFFECTS ARE EXPECTED. AT HIGH VAPOR CONCENTRATIONS, INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE, DIZZINESS, DROWSINESS, WEAKNESS, UNCONSCIOUSNESS, POSSIBLE ANESTHETIC EFFECTS FROM CENTRAL NERVOUS SYSTEM DEPRESSION, AND MAY BE FATAL.

INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING, DIARRHEA, AND EFFECTS SIMILAR TO INHALATION. INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL.

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## SECTION V - HEALTH HAZARD DATA (Continued)

### -Chronic (Long Term Exposure)

ON RARE OCCASIONS, PROLONGED AND REPEATED EXPOSURE TO OIL MIST POSES A RISK OF CHRONIC LUNG INFLAMMATION. THIS CONDITION IS USUALLY ASYMPTOMATIC AS A RESULT OF REPEATED SMALL ASPIRATIONS. SHORTNESS OF BREATH AND COUGHING ARE THE MOST COMMON SYMPTOMS. ASPIRATION MAY LEAD TO PULMONARY EDEMA AND HEMORRHAGE AND MAY BE FATAL. SIGNS OF LUNG INVOLVEMENT INCLUDE INCREASED RESPIRATION AND HEART RATES AS WELL AS A BLuish DISCOLORATION OF THE SKIN. CHRONIC SKIN CONTACT MAY PROMOTE DERMATITIS AND OIL ACNE. THIS PRODUCT HAS A NARCOTIC AND CENTRAL NERVOUS SYSTEM DEPRESSIVE EFFECT. MAY CAUSE KIDNEY AND LIVER CONGESTION IN HIGH CONCENTRATIONS. MAY CAUSE ANEMIA, EDEMA, LEUKOCYTOSIS AND A DEGENERATION OF THE VISCERA FATS. PROLONGED EXPOSURE IS ASSOCIATED TO BRONCHITIS, HEPATIC, RENAL, AND CARDIAC DAMAGES AND BLOOD ALTERATIONS. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS. PRE-EXISTING BLOOD, CARDIOVASCULAR, LIVER, AND KIDNEY DISEASES. TARGET ORGANS: LIVER, KIDNEYS, HEART, CENTRAL NERVOUS SYSTEM, CARDIOVASCULAR SYSTEM, AND BLOOD-FORMING ORGANS.

Primary Routes of Entry: X <--Inhalation <--Ingestion X <--Absorption

### Emergency and First Aid Procedures:

#### -Inhalation:

REMOVE FROM THE AREA TO FRESH AIR. SEEK MEDICAL ATTENTION IF RESPIRATORY IRRITATION DEVELOPS OR IF BREATHING BECOMES DIFFICULT.

#### -Eye Contact:

IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. GET IMMEDIATE MEDICAL ATTENTION.

#### -Skin Contact:

WASH AFFECTED AREAS WITH LARGE AMOUNTS OF SOAP AND WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

#### -Ingestion:

GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

#### -Notes to Physician:

INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. DEPENDING ON THE AMOUNT INGESTED AND RETAINED AS WELL AS THE TOXICITY OF THE PRODUCT, GASTRIC LAVAGE SHOULD BE CONSIDERED. KEEP PATIENT'S HEAD BELOW HIPS TO PREVENT PULMONARY ASPIRATION. IF COMATOSE, A CUFFED ENDOTRACHEAL TUBE WILL PREVENT ASPIRATION.

## SECTION VI - TOXICITY INFORMATION

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC--> No NTP--> No OSHA--> No ACGIH--> No OTHER--> No

### ALIPHATIC PETROLEUM DISTILLATES

ORL-RAT LD50: >25 ML/KG 3.  
IHL-RAT LC50: >710 PPM/4HR 3.  
SKN-RBT LD50: 5 ML/KG 3.  
SKN-RBT: MODERATE IRRITATION 3.  
EYE-RBT: NEGLIGIBLE IRRITATION 3.

ANIMAL DATA SUGGEST THAT SLIGHT ANEMIA, ADAPTIVE LIVER CHANGES, AND KIDNEY TOXICITY MAY BE CAUSED BY REPEATED OVEREXPOSURE TO SOME SIMILAR SOLVENTS. THE SIGNIFICANCE OF THIS TO HUMANS IS UNKNOWN. 3.

HYDROCARBON MISTS DERIVED FROM PETROLEUM DISTILLATES ARE REPORTED TO HAVE LOW ACUTE AND SUB-ACUTE TOXICITIES IN ANIMALS. EFFECTS FROM SINGLE AND SHORT-TERM REPEATED EXPOSURES TO HIGH CONCENTRATIONS WELL ABOVE APPLICABLE WORKPLACE EXPOSURE LEVELS INCLUDE LUNG INFLAMMATORY REACTION, LIPOID GRANULOMA FORMATION, AND LIPOID PNEUMONIA. IN ACUTE AND SUB-ACUTE STUDIES INVOLVING EXPOSURES TO LOWER CONCENTRATIONS AT OR NEAR CURRENT WORK PLACE EXPOSURE LEVELS PRODUCED NO SIGNIFICANT TOXICOLOGICAL EFFECTS. IN LONG TERM STUDIES (UP TO TWO YEARS) NO CARCINOGENIC EFFECTS HAVE BEEN REPORTED IN ANY ANIMAL SPECIES TESTED. THESE PETROLEUM DISTILLATES ARE SEVERELY HYDROTREATED, SEVERELY SOLVENT EXTRACTED, AND/OR PROCESSED BY MILD HYDROTREATMENT AND EXTRACTION. FOR THIS REASON, THEY ARE NOT CLASSIFIED AS CANCER HAZARDS. 3.

### ETHYL ACETATE

IHL-HMN TCLD: 400 PPM 4.  
IHL-RAT LC50: 16000 PPM/6H 3.  
ORL-RAT LD50: 5620 MG/KG 4.  
SKN-RBT LD50: >20 ML/KG 4.  
EYE-HMN SDT: 400 PPM 4.

### SODIUM SULFONATE

ORL-RAT LD50: >5 G/KG 3.  
SKN-RAT LD50: >2 G/KG 3.

### LIGHT NAPHTHENIC HYDROTREATED PETROLEUM DISTILLATES

ORL-RAT LD50: >5 GM/KG 3.  
SKN-RBT LD50: >2 GM/KG 3.  
SKN-RBT SDT: 500 MG SEVERE 3.

### SYNTHETIC ISOPARAFFINIC HYDROCARBON

IHL-RAT LC50: >290 PPM 3.  
ORL-RAT LD50: >10 G/KG 3.  
SKN-RBT LD50: >3 G/KG 3.  
SKN SENSITIZER: NO 3.  
SKN IRRITATION: SLIGHT 3.  
EYE IRRITATION: SLIGHT 3.

SYNTHETIC ISOPARAFFINIC HYDROCARBON WAS ADMINISTERED ORALLY 5 DAYS/WEEK TO MALE AND FEMALE RATS AT 100, 500 OR 1000 MG/KG FOR 13 WEEKS. AN ADDITIONAL GROUP WAS DOSED WITH 100 MG/KG FOR 13 WEEKS FOLLOWED BY A 4-WEEK RECOVERY PERIOD. NO MORTALITIES OR CLINICAL EFFECTS WERE OBSERVED. LIVER AND KIDNEY WEIGHTS FOR THE 500 AND 1000 MG/KG EXPOSURE GROUPS WERE SIGNIFICANTLY INCREASED. AFTER THE 4-WEEK RECOVERY PERIOD, THERE WERE NO DIFFERENCES IN ORGAN WEIGHTS. 3.

### N-BUTANE

IHL-RAT LC50: 658 G/M3/4H 4.

### PROPANE

IHL-LC50: >40% BY VOLUME 3.

HUMAN VOLUNTEERS EXPOSED REPEATEDLY TO GASES OF SIMILAR HYDROCARBON MIXTURES RANGING FROM 250 TO 1000 PPM EXHIBITED NO CARDIAC OR PULMONARY FUNCTION ABNORMALITIES. 3.

## SECTION VII - REACTIVITY DATA

Stability: X <--Stable <--Unstable

## SECTION VII - REACTIVITY DATA (Continued)

### Conditions to Avoid:

AVOID HEAT, HOT SURFACES, SPARKS, AND OPEN FLAMES.

### Incompatibility (Materials to Avoid):

STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH, CONCENTRATED HYDROGEN PEROXIDE, DICHROMATES, PERMANGANATES, AND POTASSIUM HYPOCHLORITE; ACIDS, SILICA GEL, POTASSIUM T-BUTOXIDE, OLEUM, NITRATES, LITHIUM TETRAHYDROALUMINATE, LITHIUM ALUMINUM HYDRIDE, CHROMIUM TRIOXIDE, CHLOROSULFONIC CHLOROMETHYLFURAN, AMINES, AND ALUMINA.

### Hazardous Decomposition Products:

OXIDES OF CARBON, NITROGEN, SODIUM, AND SULFUR; ALDEHYDES.

### Hazardous Polymerization:

<--May Occur

X <--Will Not Occur

### Conditions to Avoid:

N/A

## SECTION VIII - SPILL OR LEAK PROCEDURES

### Steps to be Taken if Material is Released or Spilled:

DUE TO THE NATURE OF THE AEROSOL PACKAGING, A LARGE SPILL IS UNLIKELY. FOR A SMALL SPILL, WEAR APPROPRIATE PROTECTIVE CLOTHING, ELIMINATE ALL SOURCES OF IGNITION, VENTILATE THE AREA, ABSORB WITH AN INERT MATERIAL, AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. USE CARE AS SPILLS MAY BE SLIPPERY.

### Waste Disposal Method(s):

DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. TYPICAL DISPOSAL IS TO WRAP THE EMPTY AEROSOL CONTAINER IN SEVERAL LAYERS OF NEWSPAPER AND DISPOSE OF IN THE TRASH. AEROSOL RECYCLING PROGRAMS ARE AVAILABLE IN MANY AREAS. DO NOT PUNCTURE OR INCINERATE THIS CONTAINER.

### Neutralizing Agent:

N/A

## SECTION IX - SPECIAL PROTECTION INFORMATION

### Required Ventilation:

LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT CAN GENERATE EXCESSIVE LEVELS OF MISTS OR VAPORS. LOCAL VENTILATION IS PREFERRED, BECAUSE IT PREVENTS DISPERSION INTO WORK AREAS BY CONTROLLING IT AT ITS SOURCE.

### Respiratory Protection:

RESPIRATORS SHOULD BE SELECTED BY AND USED UNDER THE DIRECTION OF A TRAINED HEALTH AND SAFETY PROFESSIONAL FOLLOWING REQUIREMENTS FOUND IN OSHA'S RESPIRATOR STANDARD (29 CFR 1910.134) AND ANSI'S STANDARD FOR RESPIRATORY PROTECTION (Z88.2-1992). FOR CONCENTRATIONS ABOVE THE TLV AND/OR PEL BUT LESS THAN 10 TIMES THESE LIMITS, A NIOSH APPROVED HALF-FACEPIECE RESPIRATOR EQUIPPED WITH APPROPRIATE CHEMICAL CARTRIDGES MAY BE USED. FOR CONCENTRATIONS GREATER THAN 10 TIMES THE TLV AND/OR PEL, CONSULT THE NIOSH RESPIRATOR DECISION LOGIC FOUND IN PUBLICATION NO. 87-116 OR ANSI Z88.2-1992.

### Glove Protection:

NEOPRENE OR NITRILE RUBBER GLOVES IF REPEATED OR PROLONGED SKIN CONTACT IS LIKELY. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR HAND PROTECTION, 29 CFR 1910.138.

### Eye Protection:

CHEMICAL GOGGLES SHOULD BE WORN WHEN HANDLING. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR EYE AND FACE PROTECTION, 29 CFR 1910.133.

### Other Protection:

WEAR GENERAL-DUTY WORK CLOTHING AND SHOES. REMOVE OIL SOAKED CLOTHING AND SHOES. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE. A SAFETY SHOWER AND AN EYEWASH STATION SHOULD BE AVAILABLE.

## SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature: Indoors--> X

Outdoors-->

Heated-->

Refrigerated-->

Minimum Temperature: 35°F Maximum Temperature: 120°F

### Precautions to be Taken in Handling and Storing:

USE WITH CAUTION AROUND HEAT, SPARKS, PILOT LIGHTS, STATIC ELECTRICITY, AND OPEN FLAME.

### Other Precautions:

KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS.

## SECTION XI - REGULATORY INFORMATION

Chemical Name  
None

CAS Number

Upper & Limit

Those ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Please call 1-800-527-9919 for additional information if you are a California customer.  
This MSDS is not intended for users in the state of California.

## SECTION XII - REFERENCES

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 2004.
2. OSHA PEL.

NIOSH'S MSDS.

NIOSH'S TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFOWeb, 2004.

THE COMPONENTS OF THIS PRODUCT ARE IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT (TSCA) AND ARE EITHER LISTED ON THE TSCA INVENTORY OR OTHERWISE EXEMPTED FROM LISTING.

---IRR: IRRITANT, FLAM/FLAMM: FLAMMABLE, COMB: COMBUSTIBLE,  
CORR: CORROSIVE, CARC: CARCINOGENIC, TOX: TOXIC, N/A: NOT APPLICABLE, N/E: NOT ESTABLISHED, COC: CLEVELAND OPEN CUP, FMCC: PENSKY-MARTIN CLOSED CUP,  
TCC: TAGLIABUE CLOSED CUP, LEL: LOWER EXPLOSION LIMIT, UEL: UPPER EXPLOSION LIMIT, NFPA: NATIONAL FIRE PROTECTION ASSOCIATION, IARC: INTERNATIONAL AGENCY  
FOR THE RESEARCH ON CANCER, NTP: NATIONAL TOXICOLOGY PROGRAM, OSHA: OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION, ACGIH: AMERICAN CONFERENCE OF  
GOVERNMENTAL INDUSTRIAL HYGIENISTS, TLV: THRESHOLD LIMIT VALUE, PEL: PERMISSIBLE EXPOSURE LIMIT, STEL: SHORT-TERM EXPOSURE LIMIT, MLD: MILD.

## SECTION XII - REFERENCES (Continued)

MOD: MODERATE, SEV: SEVERE, MUT: MUTAGENIC, ASPHYX: ASPHYXIANT, PNOS: PARTICLES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT: STANDARD DRAIZE TEST, ORL: ORAL, IHL: INHALATION, HNM: HUMAN

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